

**REMARKS**

Claims 1-42 are pending. Claims 6-32 and 34-39 are withdrawn. Claims 1, 40, and 42 are amended. Claims 1-5, 3, and 40-42 are rejected. New claims 43-46 are linking claims under MPEP §809.03.

**DOUBLE PATENTING**

Claims 1-5, 40-42 are rejected as being unpatentable under obviousness-type double patenting over claim 1 of the '172 patent.

Applicant respectfully disagrees. As at least one example, claim 1 in the '172 patent requires "(a) a bottom frame having an upper surface; (b) a resilient gasket coupled to said upper surface of the bottom frame". The present claims recite a gasket positioned between top and bottom planar surfaces of a heat conductive material. A gasket positioned between surfaces, rather than coupled to a bottom surface, is not obvious, at least because a non-coupled gasket is unattached and, e.g., more readily disturbed out of position.

**CLAIM REJECTIONS UNDER 35 U.S.C. §102**

Claims 1-5, 40-42 are rejected under 35 U.S.C. §102(b) as anticipated by Boyce ('878 patent).

Applicant respectfully disagrees. The presently claimed apparatus has a top planar surface of a heat conductive material and a bottom planar surface of a heat conductive material. In contrast, in the '878 apparatus, surfaces #22 and #13, to which the examiner refers, are frames forming the chamber, not the presently

claimed planar surfaces. The presently claimed apparatus also requires at least one discontinuous gasket having a uniform thickness positioned between said top and bottom surfaces to define a perimeter of said chamber, said gasket capable of containing said matrix forming fluid with said perimeter. This allows addition of the matrix fluid after surfaces are opposed and results in enhanced uniformity of the matrix. In contrast, the '878 apparatus uses only a continuous gasket, which necessitates addition of the matrix fluid before surfaces are opposed.

### **CLAIM REJECTIONS UNDER 35 U.S.C. §103**

Claim 33 is rejected under 35 U.S.C. §103(a) as obvious over Boyce in view of Kushner. Applicant respectfully disagrees.

Boyce does not teach, motivate, or suggest the present apparatus at least for the reasons analyzed above. Kushner is non-analogous art, because it is not an apparatus for casting a biologically compatible matrix resulting from freezing of matrix forming fluid. Further, Kushner's chamber is not closed; Kushner's sheet #30 lies over a fifth surface (plate #10), but remains open to form a gap of specific height (#20) between edge (#40) of plate #10 and plate #21. This gap remains open to operate the device.

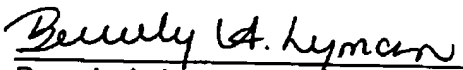
### **CONCLUSION**

For the foregoing reasons, applicant's invention is believed to be patentable and an early Notice of Allowance is respectfully requested.

Applicant knows of no fee due with this submission; the three-month date was Saturday, June 19, 2004. However, if any fees are necessary, the Commissioner may consider this to be a request for such and charge any necessary fees to Deposit Account No. 23-3000.

Respectfully submitted,

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